Amendment to the Claims

Kindly cancel claims 2, 22, and 43, and amend claims 1, 3, 10, 11, 15, 16, 18, 19, 21, 23, 30, 31, 33, 34, 36, 37, 39, 40, 42, 47, 48 and 50-53, as set forth below. In compliance with the Revised Amendment Format published in the Official Gazette on February 25, 2003, a complete listing of claims is provided herein. The changes in the amended claims are shown by strikethrough (for deleted matter) and underlining (for added matter).

1. (Currently Amended) A method of determining utilization of channel components of a computing environment, said method comprising:

obtaining individualized measurement data for [[a]] each component of selected multiple ~~component~~ components of a plurality of components of a channel~~, said channel comprising a plurality of components~~; and

using said individualized measurement data to determine utilization of each component of at least two components of said selected multiple ~~component~~ components.

2. (Canceled)

3. (Currently Amended) The method of claim 1, further comprising obtaining one or more operational characteristics of ~~said~~ a selected component of said at least two components.

4. (Original) The method of claim 3, wherein said using further comprises employing said one or more operational characteristics to determine said utilization of said selected component.

5. (Original) The method of claim 4, wherein said obtaining measurement data comprises obtaining said measurement data at a plurality of predefined intervals, and wherein said using comprises:

determining an average change in the measurement data over at least two intervals of said plurality of predefined intervals; and

dividing said average change by a value of at least one of said one or more operational characteristics.

6. (Original) The method of claim 5, wherein said value is a maximum value for that operational characteristic.

7. (Original) The method of claim 3, wherein said selected component comprises an internal channel bus, and said one or more operational characteristics of said internal bus comprise a maximum number of bus cycles.

8. (Original) The method of claim 3, wherein said selected component comprises a channel processor, and said one or more operational characteristics of said channel processor comprise a maximum number of channel work units.

9. (Original) The method of claim 3, wherein said selected component comprises an external link of said channel, and said one or more operational characteristics of said external link comprise at least one of a maximum number of written data units, a maximum number of read data units, and a size of said data units.

10. (Currently Amended) The method of claim 1, wherein ~~said selected~~ a component of said at least two components comprises one of an internal bus of said channel, a channel processor and an external link of said channel.

11. (Currently Amended) The method of claim 1, wherein the channel is associated with a logical partition of said computing environment involved in the determining utilization, and wherein the measurement data comprises data representative of use of ~~said~~ a selected component of the at least two components by said logical partition.

12. (Original) The method of claim 11, wherein the measurement data is further representative of use of said selected component by one or more other logical partitions of said computing environment.

13. (Original) The method of claim 1, wherein said obtaining measurement data is performed using a channel path measurement facility executing in a first mode.

14. (Original) The method of claim 13, wherein another channel path measurement facility is activated within said computing environment in a second mode, and wherein said channel path measurement facility in said first mode and said channel path measurement facility in said second mode are concurrently active.

15. (Currently Amended) A method of obtaining information associated with channel components of a computing environment, said method comprising:

selecting a channel within said computing environment to be monitored, said channel comprising a plurality of components; and

obtaining individualized data ~~on one or more~~ for each component of at least two components of said plurality of components.

16. (Currently Amended) The method of claim 15, wherein said obtaining individualized data comprises obtaining one or more operational characteristics of said ~~one or more~~ at least two components.

17. (Original) The method of claim 16, wherein at least one of said one or more operational characteristics comprises a maximal value of said operational characteristic.

18. (Currently Amended) The method of claim 15, wherein said obtaining individualized data comprises obtaining measurement data usable in determining utilization of each component of said ~~one or more~~ at least two components.

19. (Currently Amended) The method of claim 15, wherein said obtaining individualized data comprises:

obtaining one or more operational characteristics of said ~~one or more~~ at least two components; and

obtaining individualized measurement data for each component of said ~~one or more~~ at least two components, wherein said one or more operational characteristics and said individualized measurement data are used to determine utilization of each component of said ~~one or more~~ at least two components.

20. (Previously Presented) A method of determining utilization of channels of a computing environment, said computing environment comprising a plurality of logical partitions, and said method comprising:

obtaining, on behalf of a logical partition involved in determining utilization of a channel, measurement data for the channel, said measurement data being representative of use of said channel by the logical partition and representative of use by one or more other logical partitions of said plurality of logical partitions; and

using said measurement data to determine utilization of the channel.

21. (Currently Amended) A system of determining utilization of channel components of a computing environment, said system comprising:

means for obtaining individualized measurement data for [[a]] each component of selected multiple ~~component~~ components of a plurality of components of a channel~~, said channel comprising a plurality of components~~; and

means for using said individualized measurement data to determine utilization of each component of at least two components of said selected multiple ~~component~~ components.

22. (Canceled)

23. (Currently Amended) The system of claim 21, further comprising means for obtaining one or more operational characteristics of ~~said~~ a selected component of said at least two components.

24. (Original) The system of claim 23, wherein said means for using further comprises means for employing said one or more operational characteristics to determine said utilization of said selected component.

25. (Original) The system of claim 24, wherein said means for obtaining measurement data comprises means for obtaining said measurement data at a plurality of predefined intervals, and wherein said means for using comprises:

means for determining an average change in the measurement data over at least two intervals of said plurality of predefined intervals; and

means for dividing said average change by a value of at least one of said one or more operational characteristics.

26. (Original) The system of claim 25, wherein said value is a maximum value for that operational characteristic.

27. (Original) The system of claim 23, wherein said selected component comprises an internal channel bus, and said one or more operational characteristics of said internal bus comprise a maximum number of bus cycles.

28. (Original) The system of claim 23, wherein said selected component comprises a channel processor, and said one or more operational characteristics of said channel processor comprise a maximum number of channel work units.

29. (Original) The system of claim 23, wherein said selected component comprises an external link of said channel, and said one or more operational characteristics of said external link comprise at least one of a maximum number of written data units, a maximum number of read data units, and a size of said data units.

30. (Currently Amended) The system of claim 21, wherein ~~said selected~~ a component of said at least two components comprises one of an internal bus of said channel, a channel processor and an external link of said channel.

31. (Currently Amended) The system of claim 21, wherein the channel is associated with a logical partition of said computing environment involved in the determining utilization, and wherein the measurement data comprises data representative of use of ~~said~~ a selected component of the at least two components by said logical partition.

32. (Original) The system of claim 31, wherein the measurement data is further representative of use of said selected component by one or more other logical partitions of said computing environment.

33. (Currently Amended) A system of obtaining information associated with channel components of a computing environment, said system comprising:

means for selecting a channel within said computing environment to be monitored, said channel comprising a plurality of components; and

means for obtaining individualized data ~~on one or more~~ for each component of at least two components of said plurality of components.

34. (Currently Amended) The system of claim 33, wherein said means for obtaining individualized data comprises means for obtaining one or more operational characteristics of said ~~one or more~~ at least two components.

35. (Original) The system of claim 34, wherein at least one of said one or more operational characteristics comprises a maximal value of said operational characteristic.

36. (Currently Amended) The system of claim 33, wherein said means for obtaining individualized data comprises means for obtaining measurement data usable in determining utilization of each component of said ~~one or more~~ at least two components.

37. (Currently Amended) The system of claim 33, wherein said means for obtaining individualized data comprises:

means for obtaining one or more operational characteristics of said at least two ~~one or more~~ components; and

means for obtaining individualized measurement data for each component of said ~~one or more~~ at least two components, wherein said one or more operational characteristics and said individualized measurement data are used to determine utilization of each component of said ~~one or more~~ at least two components.

38. (Previously Presented) A system of determining utilization of channels of a computing environment, said computing environment comprising a plurality of logical partitions, and said system comprising:

means for obtaining, on behalf of a logical partition involved in determining utilization of a channel, measurement data for the channel, said measurement data being representative of use of said channel by the logical partition and representative of use by one or more other logical partitions of said plurality of logical partitions; and

means for using said measurement data to determine utilization of the channel.

39. (Currently Amended) A system of determining utilization of channel components of a computing environment, said system comprising:

at least one processor adapted to obtain individualized measurement data for [[a]] each component of selected multiple ~~component~~ components of a plurality of components of a channel~~, said channel comprising a plurality of components~~; and

at least one processor adapted to use said individualized measurement data to determine utilization of each component of at least two components of said selected multiple ~~component~~ components.

40. (Currently Amended) A system of obtaining information associated with channel components of a computing environment, said system comprising:

a channel comprising a plurality of components; and

at least one processor adapted to obtain individualized data ~~on one or more~~ for each component of at least two components of said plurality of components.

41. (Previously Presented) A system of determining utilization of channels of a computing environment, said computing environment comprising a plurality of logical partitions, and said system comprising:

at least one processor adapted to obtain, on behalf of a logical partition involved in determining utilization of a channel, measurement data for the channel, said measurement data being representative of use of said channel by the logical partition and representative of use by one or more other logical partitions of said plurality of logical partitions; and

at least one processor adapted to use said measurement data to determine utilization of the channel.

42. (Currently Amended) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to

perform a method of determining utilization of channel components of a computing environment, said method comprising:

obtaining individualized measurement data for [[a]] each component of selected multiple ~~component~~ components of a plurality of components of a channel~~, said channel comprising a plurality of components~~; and

using said individualized measurement data to determine utilization of each component of at least two components of said selected multiple ~~component~~ components.

43. (Canceled)

44. (Original) The at least one program storage device of claim 42, wherein said method further comprises obtaining one or more operational characteristics of said selected component.

45. (Original) The at least one program storage device of claim 44, wherein said using further comprises employing said one or more operational characteristics to determine said utilization of said selected component.

46. (Original) The at least one program storage device of claim 45, wherein said obtaining measurement data comprises obtaining said measurement data at a plurality of predefined intervals, and wherein said using comprises:

determining an average change in the measurement data over at least two intervals of said plurality of predefined intervals; and

dividing said average change by a value of at least one of said one or more operational characteristics.

47. (Currently Amended) The at least one program storage device of claim 42, wherein ~~said selected~~ a component of said at least two components comprises one of an internal bus of said channel, a channel processor and an external link of said channel.

48. (Currently Amended) The at least one program storage device of claim 42, wherein the channel is associated with a logical partition of said computing environment involved in the determining utilization, and wherein the measurement data comprises data representative of use of ~~said~~ a selected component of the at least two components by said logical partition.

49. (Original) The at least one program storage device of claim 48, wherein the measurement data is further representative of use of said selected component by one or more other logical partitions of said computing environment.

50. (Currently Amended) An article of manufacture, comprising:

at least one computer usable medium having computer readable program code means embodied therein for causing the obtaining of information associated with channel components of a computing environment, the computer readable program code means in the article of manufacture comprising:

computer readable program code means for causing a computer to select a channel within said computing environment to be monitored, said channel comprising a plurality of components; and

computer readable program code means for causing a computer to obtain individualized data ~~on one or more~~ for each component of at least two components of said plurality of components.

51. (Currently Amended) The article of manufacture of claim 50, wherein said computer readable program code means for causing a computer to obtain individualized data

comprises computer readable program code means for causing a computer to obtain one or more operational characteristics of said ~~one or more~~ at least two components.

52. (Currently Amended) The article of manufacture of claim 50, wherein said computer readable program code means for causing a computer to obtain individualized data comprises computer readable program code means for causing a computer to obtain measurement data usable in determining utilization of each component of said ~~one or more~~ at least two components.

53. (Currently Amended) The article of manufacture of claim 50, wherein said computer readable program code means for causing a computer to obtain individualized data comprises:

computer readable program code means for causing a computer to obtain one or more operational characteristics of said ~~one or more~~ at least two components; and

computer readable program code means for causing a computer to obtain individualized measurement data for each component of said ~~one or more~~ at least two components, wherein said one or more operational characteristics and said individualized measurement data are used to determine utilization of each component of said ~~one or more~~ at least two components.

54. (Previously Presented) At least one program storage device readable by a machine, tangibly embodying at least one program of instructions executable by the machine to perform a method of determining utilization of channels of a computing environment, said computing environment comprising a plurality of logical partitions, and said method comprising:

obtaining, on behalf of a logical partition involved in determining utilization of a channel, measurement data for the channel, said measurement data being representative of use of said channel by the logical partition and representative of use by one or more other logical partitions of said plurality of logical partitions; and

using said measurement data to determine utilization of the channel.